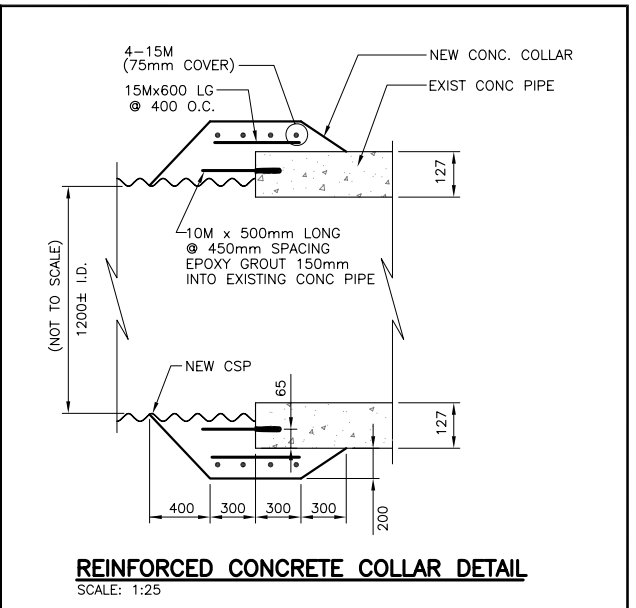


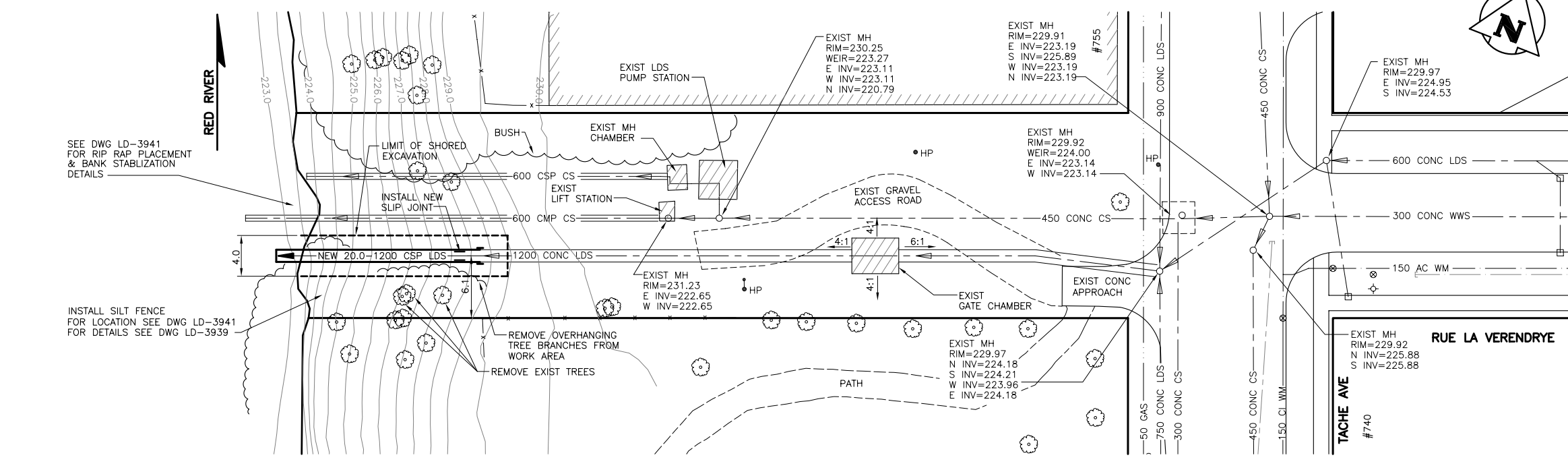
**PROFILE**  
SCALE: HOR 1:250  
VER 1:50



**REINFORCED CONCRETE COLLAR DETAIL**  
SCALE: 1:25

- NOTES:**
- CONCRETE**
- CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CAN/CSA-A23.1/ A23.2 (LATEST). SEE BELOW FOR MIX REQUIREMENTS.
  - CONCRETE MATERIALS, FORMING, PLACING, FORM REMOVAL, REINFORCING, ETC. TO ACI RECOMMENDATIONS AND ACCEPTABLE PRACTICE.
  - MIX WATER SHALL BE POTABLE. CALCIUM CHLORIDE SHALL NOT BE USED.
  - PROVIDE ADEQUATE FROST PROTECTION FOR CONCRETE DURING CURING PERIOD.
  - CONCRETE MIX DESIGN SHALL BE PROPORTIONED AS FOLLOWS:
- |                       |              |
|-----------------------|--------------|
| 28 DAY COMP. STRENGTH | 30 MPa       |
| CEMENT                | TYPE MS      |
| W/C RATIO             | 0.45         |
| AGGREGATE SIZE (MAX.) | 3/4"         |
| ENTRAINED AIR         | 4%-6%        |
| SLUMP (MAX.)          | 90mm (±10mm) |
- FOR ALL POURS SUPPLY SUPER PLASTICIZER (SLUMP PRIOR TO ADDING PLASTICIZER TO BE 100mm ±20mm AND 200mm ±25mm WITH PLASTICIZER).

- REINFORCING STEEL**
- REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CAN/CSA G30.18-M92. GRADES TO BE: 400 MPa FOR 15M BARS AND LARGER; 300 MPa FOR 10M BARS.
  - REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.
  - PROVIDE MINIMUM CONCRETE COVER FOR REINFORCING AS SHOWN ON DRAWING.



**PLAN**  
SCALE: 1:250

**RUE LA VERENDRYE OUTFALL RR-59**

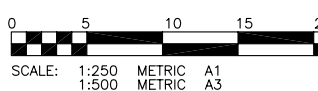
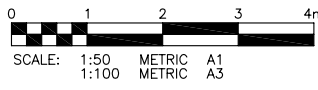
**PROPERTY LIMITS DELINEATION**

DELINEATION OF PROPERTY LIMITS AS SHOWN ON THIS DWG DOES NOT REPRESENT A "LEGAL SURVEY". KGS GROUP MAKES NO REPRESENTATION OR WARRANTY AS TO THE ACCURACY OF PROPERTY LIMITS DELINEATED ON THIS DWG, NOR ON THE DIMENSIONAL ACCURACY OF DWG FEATURES RELATIVE TO THOSE PROPERTY LIMITS.

**WARNING**

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:

- NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
- TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS. SEE PROVINCIAL REGULATION 210/72 FOR DETAILS.



EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PROFILE	PROPOSED
150 WM	WATERMAIN	150 WM	HYDRO	HYDRO	HYDRO			
300 LDS	LAND DRAINAGE SEWER	300 LDS	M.T.S.	M.T.S.	M.T.S.			
250 WWS	WASTE WATER SEWER	250 WWS	PROPERTY LINE	PROPERTY LINE	PROPERTY LINE			
	MANHOLE		SURVEY BAR	SURVEY BAR	SURVEY BAR			
	CATCH BASIN		LIGHT STANDARD	LIGHT STANDARD	LIGHT STANDARD			
	CURB INLET		HYDRO POLE	HYDRO POLE	HYDRO POLE			
	JUNCTIONS		GUY WIRE	GUY WIRE	GUY WIRE			
	CULVERT		SIGN	SIGN	SIGN			
	GAS		BUSH LINE	BUSH LINE	BUSH LINE			
			FENCE	FENCE	FENCE			
			ELEVATION	ELEVATION	ELEVATION			

**LOCATION APPROVED UNDERGROUND STRUCTURES**

SUPV. U/G STRUCTURES COMMITTEE DATE

**NOTE:**  
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M. ELEV.	34-016 230.003	S.E. COR. TACHE AVE. & RUE MESSAGER, TBLT. IN N. CONC. FOUNDATION OF W.P.C. WATERWORKS BOOSTER PUMPING STATION, 3.0m E. & 0.2m BELOW BRICK OF N.W. COR. OF BLDG.
NO.	REVISIONS	DATE BY
0	ISSUED FOR TENDER	14/12/07 RJH

**KGS GROUP**  
CONSULTING ENGINEERS & PROJECT MANAGERS  
WINNIPEG (204) 896-1209  
THUNDER BAY (807) 345-2233

DESIGNED BY: RJH  
CHECKED BY: RJH  
DRAWN BY: DW  
APPROVED BY: [Signature]  
HOR. SCALE: 1:250  
VERTICAL: 1:50  
ISSUED FOR TENDER: 14/12/07 RJH  
DATE: 30/11/07

ENGINEER'S SEAL

ORIGINAL SIGNED BY R.J. HOUSTON 14 DEC 07

CONSULTANT DRAWING NO. 07-0107-25 01

**THE CITY OF WINNIPEG**  
WATER & WASTE DEPARTMENT

2007 OUTFALL REPAIRS  
**RUE LA VERENDRYE OUTFALL (RR-59)**

SHEET 01 OF 05  
CAD FILE DRAWING NUMBER: RUE LA VERENDRYE-PLOT.DWG  
CITY DRAWING NUMBER: LD-3938

**APCGM**  
Certificate of Authorization  
KGS Group  
No. 245 Date: \_\_\_\_\_